# Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
	)	
Automatic and Manual Roaming Obligations	)	
Pertaining to	)	WT Docket No. 00-193
Commercial Mobile Radio Services	)	
	)	
	)	
	)	
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## NOTICE OF PROPOSED RULEMAKING

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By the Commission:

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#### I. INTRODUCTION

1. In this notice of proposed rulemaking (NPRM), we initiate a new proceeding to consider whether the Commission should adopt an "automatic" roaming rule that would apply to Commercial Mobile Radio Service (CMRS) systems and whether we should sunset the "manual" roaming requirement that currently applies to those systems. We recently terminated our previous consideration of these roaming issues under CC Docket No. 94-54, a long-standing proceeding. In light of the significant growth and development during the last few years of CMRS services provided by cellular, broadband Personal Communications Service (PCS), and Specialized Mobile Radio (SMR) systems, and given recent advancements in CMRS technologies, we believe that a new docket dedicated solely to roaming issues best ensures that we will have up-to-date, pertinent information as we consider whether, given the state of today's marketplace, there is a need for a regulatory regime for roaming services.

#### II. BACKGROUND

#### A. Roaming

- 2. Roaming occurs when the subscriber of one CMRS provider utilizes the facilities of another CMRS provider with which the subscriber has no direct pre-existing service or financial relationship to place an outgoing call, to receive an incoming call, or to continue an in-progress call.<sup>3</sup> Roaming service can be provided through a variety of technical and contractual arrangements. The basic technical requirement for either "manual" or "automatic" roaming is that the subscriber have a handset technically capable of accessing the roamed-on ("host") system.<sup>4</sup>
- 3. "Manual" roaming is the most rudimentary form of roaming. It is the only form of roaming that is available when there is no pre-existing contractual relationship between a subscriber, or her home system, and the system on which she wants to roam. In order to make or receive a call, a manual roamer must establish such a relationship with the host carrier. Typically, the manual roamer accomplishes this in the course of attempting to originate a call by giving a valid credit card number to the carrier providing service.<sup>5</sup>
  - 4. "Automatic" roaming means that the roaming subscriber is able to originate or terminate a call

Roaming, including the definition of both "manual" and "automatic" roaming, is explained, *infra*, in Section II(A).

<sup>&</sup>lt;sup>2</sup> See Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, CC Docket No. 94-54, Third Report and Order and Memorandum Opinion and Order on Reconsideration, FCC 00-251 (rel. Aug. 28, 2000). The portions of that item that ordered termination of consideration of roaming issues in that docket, ¶¶ 3, 22-24, will be referenced herein as the *Docket Termination Order*, while those portions that generally affirmed the manual roaming rule, ¶¶ 1-2, 4-21, will be referenced herein as the *Manual Roaming Order on Reconsideration*.

<sup>&</sup>lt;sup>3</sup> See Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, CC Docket No. 94-54, Second Report and Order and Third Notice of Proposed Rulemaking, 11 FCC Rcd 9462, 9464 (¶ 3) (1996) (Second Report and Order and Third NPRM, respectively).

<sup>&</sup>lt;sup>4</sup> Second Report and Order, 11 FCC Rcd at 9466 (¶ 7).

<sup>&</sup>lt;sup>5</sup> *Id.* at 9465 (¶ 5).

without taking action other than turning on her telephone. This form of roaming requires a contractual agreement between the home and the roamed-on host systems, *i.e.*, between carriers. Before a subscriber can complete an originating call under an automatic roaming arrangement, the host system first identifies the subscriber's home carrier by means of the subscriber's telephone number, verifies that it has an arrangement with that carrier, and queries the carrier to verify that the subscriber's account is current (and in some instances to obtain information about the subscriber, such as her preferred service features).

# **B.** Current Requirements

- 5. Prior to 1996, the Commission's rules required only cellular carriers to offer manual roaming. In 1996, in the Second Report and Order and accompanying Third NPRM, the Commission considered the imposition of manual and automatic roaming obligations on CMRS providers generally. In the Second Report and Order, the Commission determined that the availability of roaming on broadband wireless networks was important to the development of nationwide, ubiquitous, and competitive wireless voice telecommunications, and that during the period in which these service systems were being built market forces alone might not be sufficient to cause roaming to become widely available. 10 The Commission also concluded that roaming is a common carrier service, 11 and that the Commission has authority to impose a roaming requirement in the public interest pursuant to our licensing authority under Sections 303(r) and 309 of the Communications Act of 1934, as amended. The Commission also noted that roaming capability was widely available to cellular subscribers and highly valued by those subscribers, that roaming capability was a key factor considered by consumers when distinguishing between services offered by providers in the wireless marketplace, and that newer entrants might be at a competitive disadvantage vis-àvis incumbent wireless carriers if their subscribers had no ability to roam on other networks. <sup>13</sup> Accordingly, the Commission extended the then-existing manual roaming rule requiring cellular carriers to serve individual roamers to include other CMRS providers, both broadband PCS and "covered" SMR, that offer comparable competitive telephony services so long as the roamer's handset is technically capable of accessing their services. 14
  - 6. In the Third NPRM, the Commission invited additional comment on both automatic and manual

<sup>&</sup>lt;sup>6</sup> This form of roaming is sometimes referred to as "seamless" roaming. However, some parties understand "seamless" roaming to include handoff of calls in progress as one moves from the service area of one provider to another. For the sake of clarity, we use the term "automatic" roaming to refer to origination and termination of calls without the need for any special facilitating action by the subscriber.

See Second Report and Order, 11 FCC Rcd at 9465-66 (¶ 6).

<sup>&</sup>lt;sup>8</sup> Id. at 9470 (¶ 12); see 47 C.F.R. § 22.901 (1995).

<sup>&</sup>lt;sup>9</sup> See generally Second Report and Order and Third NPRM, 11 FCC Rcd 9462.

<sup>&</sup>lt;sup>10</sup> Second Report and Order, 11 FCC Rcd at 9464 (¶ 2), 9468-70 (¶¶ 10-11).

<sup>&</sup>lt;sup>11</sup> Id. at 9469 (¶ 10).

<sup>&</sup>lt;sup>12</sup> 47 U.S.C. §§ 303(r), 309. See Second Report and Order, 11 FCC Rcd at 9469 (¶ 10).

<sup>&</sup>lt;sup>13</sup> *Id.* at 9469-70 (¶ 11).

<sup>&</sup>lt;sup>14</sup> *Id.* at 9464 (¶ 2), 9470-71(¶¶ 12-14).

roaming. Specifically, it asked whether the Commission should promulgate any rule governing covered providers' obligations to provide automatic roaming service. The *Third NPRM* further posited that the market would likely render any automatic roaming rule unnecessary five years after the last group of initial licenses for broadband PCS spectrum was awarded, and it asked whether any automatic roaming rule, as well as the existing manual roaming rule, should be sunset at that time. The Wireless Telecommunications Bureau subsequently sought further comment on automatic roaming in a public notice. The work of the provider of the prov

7. In July 2000, the Commission generally affirmed the manual roaming requirement in the *Manual Roaming Order on Reconsideration*, <sup>17</sup> while modifying the definition of which CMRS providers were "covered" as well as extending the rule's application to certain data providers. <sup>18</sup> Thus the manual roaming requirement, as amended, applies to all cellular, broadband PCS, and SMR providers that offer real-time, two-way switched voice or data service that is interconnected with the public switched network and utilizes an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls. <sup>19</sup> In that same order, the Commission terminated consideration in CC Docket No. 94-54 of the issues raised in the *Third NPRM*, finding that subsequent developments in the market and technology had rendered the record stale. <sup>20</sup>

# C. Current State of the Marketplace

- 8. At the time of the issuance in 1996 of the manual roaming rule, the CMRS market and related technologies were significantly less advanced than today. For instance, in 1996 cellular providers dominated the CMRS telephony marketplace. It was not until November 1995 that the first broadband PCS service had been launched, and SMR providers were only beginning to deploy the technologies that would enable them to compete directly with those services provided by cellular and broadband PCS systems. Furthermore, dual-band and dual-mode handsets, critical to the development of widespread roaming, were still in the process of being developed and placed on the market.
- 9. During the past few years, dramatic changes have continued to occur in the CMRS marketplace. Following the initial auctions of the A and B block broadband PCS spectrum during 1994-95, and the C, D, E, and F block broadband PCS spectrum during 1995-97, PCS licensees have been

<sup>15</sup> The last group of initial licenses for broadband PCS spectrum was awarded on November 24, 1997. Thus, the hypothetical sunset date discussed in the *Third NPRM* will fall on November 24, 2002. *See* Public Notice, "Commencement of Five-Year Period Preceding Termination of Resale Rule Applicable to Certain Covered Commercial Mobile Radio Service Providers, CC Docket No. 94-54, 13 FCC Rcd 17427 (1998) (establishing November 24, 2002 – five years after we awarded the last group of initial licenses for broadband PCS – as the sunset date for CMRS resale rule).

<sup>&</sup>lt;sup>16</sup> Public Notice, "Commission Seeks Additional Comment on Automatic Roaming Proposals For Cellular, Broadband PCS, and Covered SMR Networks [in] CC Docket No. 94-54," (DA 97-2558) (December 5, 1997) (Public Notice).

<sup>17</sup> See Manual Roaming Order on Reconsideration at ¶ 21.

<sup>&</sup>lt;sup>18</sup> *Id.* at ¶¶ 9-17, 19.

<sup>&</sup>lt;sup>19</sup> *Id.* at ¶ 18.

Docket Termination Order at ¶ 22-24.

building out their networks. Similarly, certain SMR providers have developed services that compete directly with services typically offered by cellular and broadband PCS. As recently reported in our *Fifth CMRS Competition Report*, new entrant wireless providers – both broadband PCS and digital SMR operators – have continued to deploy their networks in an increasing number of markets. <sup>21</sup> The mobile telephone services offered by cellular, broadband PCS, and certain SMR systems now are essentially interchangeable for many consumers. <sup>22</sup>

- 10. The *Fifth CMRS Competition Report* examined the state of competition in 1999 among CMRS telephony providers. We found that the mobile telephony sector continues to experience heightened competition as a result of the expansion of service by broadband PCS and digital SMR carriers. We also noted that in the five years since the Commission first granted the A and B block broadband PCS licenses, non-cellular carriers have built extensive networks covering a large portion of the country's population, with coverage increasing each year. We found that, by the end of 1999, 88 percent of the total U.S. population have at least three carriers (two cellular and one non-cellular) offering mobile telephone service in at least some part of the counties in which they live, 69 percent of the population can choose among at least five carriers, and 11 percent can choose among seven different mobile telephone operators. Our analysis also reflected, however, that the more populous areas tend to have the most competitive markets, while the more rural areas in the country are less likely to be experiencing the same level of competition from new entrants.
- 11. In addition, we noted in the *Fifth CMRS Competition Report* that consolidation of the CMRS mobile telephone sector continues. Since issuance of the *Fourth CMRS Competition Report* the year before, two new nationwide<sup>26</sup> operators, Verizon Wireless and Voicestream, have emerged alongside the three other operators with nationwide footprints, AT&T Wireless Services, Sprint PCS Group, and Nextel.<sup>27</sup> In addition, SBC and BellSouth have agreed to combine their U.S. mobile wireless operations

See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, Fifth Report (FCC 00-289) (rel. Aug. 18, 2000) (Fifth CMRS Competition Report) at 5-6.

<sup>&</sup>lt;sup>22</sup> *Id.* at 9.

<sup>&</sup>lt;sup>23</sup> *Id*, at 11.

<sup>&</sup>lt;sup>24</sup> *Id.* at 18. Note, however, that this coverage analysis overstates to some degree the total coverage in terms of both geographic areas and populations because the analysis, which is county-by-county, counts all of the geographic area and population found in each county where there is some coverage even if that service only covers part of a county. *Id.* 

<sup>&</sup>lt;sup>25</sup> *Id.* For instance, while 88 percent of the total population had at least 3 mobile telephony carriers providing service within their counties, these counties make up only 35% of the total land area of the United States (42% excluding Alaska). *Id.* Dividing counties into quartiles by population shows a similar pattern. While 85.8% of the counties in the top quartile had at least one broadband PCS operator providing service, only 12% of the counties in the bottom quartile had some broadband PCS coverage. *Id.* at 30.

The term "nationwide" does not necessarily mean that the operator's license areas, service areas, or pricing plans cover the entire land area of the United States. Instead, the term is applied when an operator offers service in at least some portion of the western, middle, and eastern United States. *Id.* at 9-10, n.38.

<sup>&</sup>lt;sup>27</sup> *Id.* at 9-10.

into a joint venture.<sup>28</sup> One of the driving forces behind these consolidations has been the desire of large regional carriers to enhance their ability to compete effectively with some national operators.<sup>29</sup> And, while most of the high profile transactions have been on a national stage, there also have been several smaller transactions that have been completed or announced over the last year. Many of these have involved existing nationwide or regional operators purchasing smaller companies in order to expand or enhance their existing footprints.<sup>30</sup> Smaller operators have also made acquisitions in an attempt to increase the size of their footprints.<sup>31</sup> Digital SMR remains dominated by one provider, Nextel, which in 1999 had over 4.5 million subscribers, while the second largest provider had approximately 200,000 subscribers, and the third largest approximately 65,000 subscribers.<sup>32</sup>

- 12. Dramatic changes also have occurred with respect to CMRS technologies. Many analog systems have been, or are in the process of being, converted to digital systems.<sup>33</sup> Technological standards and handsets that render certain CMRS systems interoperable have been developed so as to enable widespread roaming among CMRS providers. For instance, multi-mode and multi-band handsets have become widely available. These technologies have made certain analog and digital networks, and certain cellular and broadband PCS networks, interoperable.<sup>34</sup> It should be noted, however, that SMR technology apparently remains incompatible with cellular and broadband PCS networks.<sup>35</sup>
- 13. These developments, among others, have had an impact on the nature and extent to which automatic roaming has become available to end users. Many carriers have reached automatic roaming agreements among themselves, and various forms of automatic roaming have become commonplace. As we noted in our *Fifth CMRS Competition Report*, analysts report that roaming prices have substantially declined during the past couple of years. Analysts attribute this reduction primarily to new switching capability and to rural buildout by affiliates of major carriers. First, technological developments have further improved the ability of digital handsets to roam on additional networks. As a result, the major

<sup>&</sup>lt;sup>28</sup> *Id.* at 12.

<sup>&</sup>lt;sup>29</sup> *Id.* at 10-11.

<sup>&</sup>lt;sup>30</sup> *Id.* at 12.

<sup>&</sup>lt;sup>31</sup> *Id*.

<sup>&</sup>lt;sup>32</sup> *Id.* at 30; Appendix D-2.

<sup>&</sup>lt;sup>33</sup> *Id.* at 13-14.

<sup>&</sup>lt;sup>34</sup> *Id.* at 20.

See Implementation of Section 6002(b) of the Omnibus Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, Fourth Report, 14 FCC Red 10,145, 10,177 (1999).

<sup>&</sup>lt;sup>36</sup> Fifth CMRS Competition Report at 20.

<sup>&</sup>lt;sup>37</sup> *Id*.

For instance, improvements now allow digital handsets to switch between the A and B cellular and PCS bands, provided the customer has a dual band phone and the digital standards are compatible. This constitutes (continued....)

carriers are able to leverage large bundles of roaming minutes when negotiating for roaming rates. Second, several major carriers have entered agreements with affiliates to build out their secondary and rural markets. As a result, carriers have additional alternatives for their traffic, which potentially lowers roaming rates. In addition, the recent advent and widespread adoption by virtually all of the major operators of "digital-one-rate" (DOR) price plans, where subscribers can purchase a bucket of minutes-of-use on a nationwide or nearly-nationwide network without incurring roaming (or long distance) charges, may serve to exert downward price pressure on roaming rates. Thus, over the last few years automatic roaming has become widespread, and roaming rates generally have continued to fall.

#### III. NOTICE OF PROPOSED RULEMAKING

- 14. In this NPRM, we invite comments on: (1) whether we should adopt an automatic roaming requirement that would apply to certain CMRS providers, and if so, how it should be designed and implemented and for what period of time; and (2) whether we should, either now or in the future, sunset the existing manual roaming requirement placed on those providers. Comments should include discussion of developments in the market and in technologies, such as those developments discussed above in Section II(C), that should inform our analysis of what regulatory actions, if any, the Commission should take on roaming. We issue this NPRM to further the goals and requirements of the Communications Act of 1934, as amended, including the charge given us by Congress to promote competition, including facilities-based competition, and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies. <sup>42</sup>
- 15. We continue to adhere to the general principles on roaming that we enunciated in the *Second Report and Order*. We affirm our conclusion in that order that ubiquitous roaming on CMRS systems is important to the development of a seamless, nationwide "network of networks." We further affirm our determination that roaming is a common carrier service because roaming capability gives end users access to a foreign network in order to communicate messages of their own choosing, and thus that the provision of roaming is subject to the requirements of Sections 201(b), 202(a), and 332(c)(1)(B) of the Communications Act. In addition, we have the authority to impose a roaming requirement in the public interest pursuant to our license conditioning authority under Sections 303(r) and 309 of the Act.

an improvement over old analog phones, which were only able to search for one of the two cellular bands and had to be manually reprogrammed to roam on another network. *Id.* 

<sup>&</sup>lt;sup>39</sup> *Id.* 

<sup>40</sup> Id

<sup>&</sup>lt;sup>41</sup> 47 U.S.C. §§ 151 et seq. (the "Communications Act" or the "Act").

<sup>&</sup>lt;sup>42</sup> See generally Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996).

<sup>&</sup>lt;sup>43</sup> Second Report and Order, 11 FCC Rcd at 9467 (¶ 8).

<sup>&</sup>lt;sup>44</sup> See id. at 9469 (¶ 10).

<sup>&</sup>lt;sup>45</sup> *Id.*; see WBEN, Inc. v. United States, 396 F.2d 601, 617-19 (2d Cir.), cert. denied sub nom. WBEN, Inc. v. FCC, 393 U.S. 914 (1968); Upjohn Co. v. FDA, 811 F.2d 1583 (D.C. Cir. 1987; Committee for Effective Cellular Rules v. FCC, 53 F.3d 1309, 1318-20 (D.C. Cir. 1995).

16. We believe it important to state at the outset of this NPRM our general approach to considering whether to adopt an automatic roaming rule or continue to maintain the manual roaming rule. To the extent that competition in the CMRS marketplace has eliminated the means or the economic incentives for certain CMRS providers to discriminate unreasonably in the provision of roaming, or otherwise to engage in unjust or unreasonable practices, we believe that requirements imposed by the Commission would not be in the public interest. Thus, we proposed in the *Third NPRM* to sunset any automatic roaming rule five years after we awarded the last group of initial broadband PCS licenses because we believed the market would at that time render regulations superfluous. Only where market forces alone are not sufficient to ensure the widespread availability of competitive roaming services, and where roaming is technically feasible without imposing unreasonable costs on CMRS providers, do we believe it may be in the public interest to impose a roaming requirement that will facilitate the widespread availability of roaming and promote competition in wireless services. We invite comment on this approach and these conclusions.

# A. Automatic Roaming

- 17. In the 1996 *Third NPRM*, the Commission stated that the record at that time was inconclusive as to whether it should adopt an automatic roaming rule. The Commission determined that taking any action on automatic roaming would be premature because of the anticipated costs of such a rule, technological impediments (*e.g.*, interoperability issues), and the possibility that competition among the increasing number of CMRS providers would ensure development of automatic roaming arrangements that would protect the public interest. <sup>49</sup> In this NPRM, we seek up-to-date information on automatic roaming that will enable the Commission to fully consider the question and reach an informed decision about whether to adopt such a rule. We seek comment on the advantages or disadvantages of an automatic roaming rule under current and/or anticipated market conditions and utilizing current and/or anticipated technologies. We invite comment from parties representing all interests in the CMRS market, including new entrants that may not have had a full opportunity to participate in our earlier proceeding. <sup>50</sup>
- 18. Initially, we do not believe we should adopt any automatic roaming rule unless it is clear that providers' current practices are unreasonably hindering the operation of the market to the detriment of consumers.<sup>51</sup> We therefore seek comment on the availability of automatic roaming generally, and on whether there is any history of wireless providers denying roaming agreements to other providers in a

<sup>&</sup>lt;sup>46</sup> See Third NPRM, 11 FCC Rcd at 9471-72 (¶¶ 16-17).

<sup>&</sup>lt;sup>47</sup> *Id.* at 9479 (¶ 32).

<sup>48</sup> See Second Report and Order, 11 FCC Rcd at 9470-71 (¶ 13).

<sup>&</sup>lt;sup>49</sup> Third NPRM, 11 FCC Rcd at 9471-72 (¶ 15).

We note that very few of the providers that had their primary holdings in the C, D, E, and F blocks of broadband PCS licenses filed comments on either the *Third NPRM* or the *Public Notice* in CC Docket No. 94-54.

Many of the commenters in recently terminated CC Docket No. 94-54 contended that an automatic roaming rule would constitute an unwarranted departure from our general policy of allowing market forces, instead of regulation, to shape development of wireless technologies and a competitive marketplace. *See*, *e.g.*, Bell Atlantic NYNEX Mobile, Inc. (Bell Atlantic) *Third NPRM* Comments at 2 and Reply Comments at 1-3; Cellular Telecommunications Industry Association (CTIA) *Third NPRM* Comments at 10-12 and Reply Comments at 8-9.

manner that harms consumers. If so, what evidence is there that these denials have been unreasonable or discriminatory, and what incentives are there for refusing to enter into reasonable agreements? We also seek comment on whether providers have discriminated unreasonably with respect to the prices or other terms on which they make roaming agreements available to different carriers. In addition, we seek information on whether any particular class of providers is especially likely to refuse to enter into reasonable and non-discriminatory roaming agreements. For example, do providers' incentives and practices differ depending on whether they operate cellular, broadband PCS, or SMR networks?<sup>52</sup> Are incumbent or large providers more likely to deny roaming agreements than smaller providers or new entrants?

- 19. In recent years, a number of carriers, including AT&T, Sprint, Nextel, Verizon, Voicestream, and SBC and BellSouth have acquired or are in the process of acquiring nationwide "footprints" and networks. We seek comment on whether carriers with nationwide or other geographically extensive holdings have an incentive to deny automatic roaming agreements to their local or regional competitors. If so, should an automatic roaming rule be fashioned to reach only these larger providers? We also seek comment on the relationship, if any, between our CMRS spectrum cap and the need for an automatic roaming requirement. 53
- 20. We also seek comment on whether the absence of an automatic roaming rule has hindered or promoted facilities-based competition among CMRS providers. To the extent that evidence is presented showing that certain carriers are not willing to enter into reasonable roaming agreements, we further seek comment on the extent to which this refusal affects competition. Thus, we seek comment on whether carriers in the CMRS market, including new entrants and smaller carriers, have viable options to obtain automatic roaming agreements or other arrangements if incumbent or large providers refuse to enter into such agreements. We also seek comment on whether small or local carriers need access to nondiscriminatory roaming agreements in order to compete, or whether there is a sustainable market for customers who have little or no interest in roaming.
- 21. To the extent the record evidence establishes the existence of a problem that an automatic roaming rule could remedy, we then must weigh the potential benefits of regulation against its costs. This

We note that the Commission recently received an *ex parte* filing in CC Docket 94-54 (prior to its termination) in which one SMR provider contended that there is particular need for an automatic roaming rule relating to SMR networks because of the consolidated nature of the SMR industry and because current technological constraints restrict SMR customers' ability to roam on cellular or PCS networks. *See* February 18, 2000 letter from Southern Communications Services Inc., d/b/a Southern LINC (Southern), to Magalie Roman Salas, Secretary, FCC, "Ex Parte Filing, CC Docket No. 94-54; Interconnection and Resale Obligations Pertaining to CMRS." *See also* Southern *Third NPRM* Reply Comments at 6, 9-10 (pointing out roaming technical issues pertinent only to SMR networks) and *Public Notice* Comments at 8 (contesting allegations by other SMR providers that inter-SMR roaming is technically infeasible).

<sup>53</sup> See 47 C.F.R. § 20.6 (placing a limit on the amount of spectrum in which, in a particular geographic area, any cellular, broadband PCS, or digital SMR licensee may have an attributable interest).

Some of the commenters in CC Docket No. 94-54, including new entrants, smaller providers, and providers not affiliated with large or incumbent providers contended that an automatic roaming rule was necessary to assure them of being able to enter reasonable, non-discriminatory automatic roaming agreements so that they could compete effectively in the CMRS marketplace. *See, e.g.*, Alliance of Independent Wireless Operators (AIWO) *Third NPRM* Comments at 1, 3-5; Western Wireless Corporation (Western Wireless) *Third NPRM* Comments at 7-8, 11-12 and Reply Comments at 3-4.

balance depends in large part on the specific rule that we would consider. In the *Third NPRM*, we suggested that one possible automatic roaming rule could require, as a condition of license, that covered providers that enter into roaming agreements with other such providers make like agreements available to similarly situated providers, where technically compatible handsets are being used, under non-discriminatory rates, terms, and conditions. Such a rule could prevent established carriers from entering into favorable agreements with selected providers while unreasonably denying such agreements to similarly situated carriers. It would not require carriers to provide roaming service to any carrier at all. Were we to establish such a rule, we seek comment on how we should define "similarly situated" in the rule. Seek comment generally on any other potential automatic roaming rules that may be appropriate.

- 22. Commenters should address not only the potential benefits of various regulatory options, but also the potential costs. For example, would an automatic roaming rule create disincentives to the growth of facilities-based competition, or to the continued development of nationwide footprints? Would a nondiscrimination rule or any other automatic roaming rule thwart CMRS carriers' ability to compete vigorously on the basis of the particular roaming services provided, or otherwise impede carriers' ability to differentiate their roaming services? Would such a rule impede the development of new and improved roaming features? What new and improved roaming services have developed over the past few years in the absence of an automatic roaming requirement? In addition, how would constraints imposed by any particular roaming rule affect the competitiveness of particular carriers? Would the costs of a rule impact small carriers disproportionately, such that some form of exemption for those carriers would be appropriate?
- 23. We also seek comment on any administrative costs that would arise from a non-discrimination requirement or other automatic roaming rule, were such a rule to be implemented. With respect to a potential non-discrimination requirement in particular, we seek comment on any burdens that would arise from the need to determine whether carriers seeking roaming agreements are "similarly situated."
- 24. We further request comment on any and all current and anticipated technical considerations that should influence our decision. For instance, have technical advances enabled widespread interoperability of CMRS networks or otherwise eased the difficulties associated with making automatic roaming possible? We also seek comment on any technical relationship between the introduction of local number portability and automatic roaming.
- 25. In the existing manual roaming requirement, we require that the subscriber seeking to roam must first possess a handset that is technically capable of accessing the roamed-on system. Similarly, we believe that if an automatic roaming requirement were imposed, the carrier seeking to enable its subscribers to roam on another system should have the burden of developing and implementing any technology necessary to achieve that result. In addition, we believe that any automatic roaming rule should be sufficiently flexible to permit a carrier to change its technology for legitimate business reasons (e.g., increasing capacity, spectrum efficiency, fraud control, or deployment of enhanced features) without any

<sup>&</sup>lt;sup>55</sup> *Third NPRM*, 11 FCC Rcd at 9475 (¶ 22).

Several commenters in Docket CC No. 94-54 contended that, given the complex factors that are part of negotiations and determine the nature of any particular automatic roaming arrangement between any two carriers, carriers are rarely (if ever) "similarly situated." *See, e.g.*, CTIA *Third NPRM* Comments at 15 and Reply Comments at 5-7; Rural Cellular Association (RCA) *Third NPRM* Comments at 4.

<sup>&</sup>lt;sup>57</sup> See Third NPRM, 11 FCC Rcd at 9470 (¶ 13).

obligation to make the system accessible to roamers using different technologies; presumably under such a rule, however, a carrier could not introduce features into its system in order to obstruct service to roamers from systems using otherwise compatible technologies. We seek comment on this analysis, as well as comment on the possible design of a rule reflecting this approach.

- 26. To the extent that a CMRS provider engages in unreasonable and discriminatory behavior by refusing to enter an automatic roaming agreement, we also seek comment on whether there are adequate remedies under existing law, such as the means permitted under Sections 201, 202, 208, and 251of the Act. We seek general comment on whether the avenues of complaint and redress afforded by Section 208 provide sufficient and appropriate means of ensuring the development of automatic roaming services in a competitive CMRS market, or whether an automatic roaming requirement is necessary in order to serve the public interest.
- 27. We also seek comment on whether any automatic roaming rule should require a carrier to enter an automatic roaming arrangement on a nondiscriminatory basis with a facilities-based competitor in the same market ("in-market" roaming). For instance, do such agreements diminish carriers' incentives for building out their networks? We seek comment on how an exception that permits carriers to deny roaming agreements to "in-market" competitors could be administered, given the different geographic scope of cellular, broadband PCS, and SMR licenses and operations.
- 28. Similarly, we seek comment on whether providers should be permitted to offer roaming agreements to affiliates on different terms and conditions than to non-affiliates, or whether, instead, agreements favorable to affiliates constitute unreasonable, discriminatory behavior. We seek comment on whether it would serve the public interest to require carriers to make roaming service available to other carriers in one-way agreements under the same terms and conditions as under reciprocal agreements. We also request comment on whether a carrier should be able to offer a lower rate to a geographically proximate carrier. In addition, we request comment on to what extent, if any, an automatic roaming rule should encompass requirements specifically affecting resellers, and on the costs and benefits of any such requirements.
- 29. Finally, we seek comment on any other issue that a commenter believes is important for the Commission to consider as we determine whether it would be in the public interest to impose an automatic roaming requirement on CMRS providers, including, for example, any concerns regarding subscriber privacy or carriers' control over proprietary information.

<sup>&</sup>lt;sup>58</sup> Several commenters in CC Docket No. 94-54 contended that existing remedies were sufficient. *See, e.g.*, Bell Atlantic *Third NPRM* Comments at 7-8; Rural Telecommunications Group *Third NPRM* Comments at 4.

Several commenters in CC Docket No. 94-54 argued in favor of such a requirement. See, e.g., AT&T Wireless Public Notice Comments at 6-8, 10 and Reply Comments at 5; Sprint Spectrum, L.P. d/b/a Sprint PCS Public Notice Comments at 2, 5-7. Others opposed such a requirement. See, e.g., BellSouth Corporation Public Notice Reply Comments at 5-6; Centennial Cellular Corporation Public Notice Reply Comments at 4-5.

#### B. Manual Roaming

- 30. In 1996, having determined that roaming was a critical element of CMRS service, we found that, at a minimum, some form of roaming rule was necessary as the broadband PCS networks were being built out. Accordingly, in our *Second Report and Order* we expanded the manual roaming requirement to broadband PCS and certain SMR providers so that subscribers with technically capable handsets would be assured of being able to roam.<sup>60</sup>
- 31. We now believe it is appropriate, in the context of the current NPRM, to reexamine the manual roaming requirement. We seek up-to-date information on the practice of manual roaming and the continued utility of the manual roaming rule. How often do subscribers avail themselves of this service? In light of both the evolution of the CMRS market and advancements in CMRS technologies, to what extent has manual roaming fallen into disuse or been replaced by automatic roaming? Given the role of manual roaming in today's marketplace, we request comment regarding whether the manual roaming rule should be eliminated, either in combination with the promulgation of an automatic roaming rule or without such a rule. Commenters should address the extent to which the manual roaming rule actually promotes the goals we sought to achieve in our 1996 Second Report and Order, the nature and extent of any costs imposed by the manual roaming rule, and the relative weight of these costs and benefits.

#### C. Sunset of Roaming Rule(s)

32. When issuing the *Third NPRM* in 1996, the Commission tentatively concluded that any roaming rule adopted, whether manual or automatic, should apply only for a transitional period. <sup>61</sup> It stated its belief that once broadband PCS providers' buildout periods were completed, sufficient wireless capacity would be available that would likely render a manual or automatic roaming rule unnecessary. <sup>62</sup> We renew this tentative conclusion. We seek comment on whether any automatic or manual roaming requirement that we adopt or retain in this proceeding should be sunset and, if so, when. Further, we inquire whether any sunset of the manual roaming rule should be contingent upon adoption of an automatic roaming rule.

#### IV. PROCEDURAL MATTERS

# A. Regulatory Flexibility Act

33. As required by the Regulatory Flexibility Act (RFA), <sup>63</sup> the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the potential regulatory actions on which comment is requested in this Notice of Proposed Rulemaking. The IRFA is set forth in the attached Appendix. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines for comments on the rest of this

<sup>&</sup>lt;sup>60</sup> Second Report and Order, 11 FCC Rcd at 9470-71 (¶ 13), as affirmed in the Manual Roaming Order on Reconsideration at ¶¶ 2, 6-21.

<sup>&</sup>lt;sup>61</sup> Second Report and Order, 11 FCC Rcd at 9479 (¶ 32).

<sup>°≟</sup> Id

<sup>&</sup>lt;sup>63</sup> See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 et. seq., has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

Notice of Proposed Rulemaking, as set forth in Section IV(C), *infra*, and they must have a separate and distinct heading designating them as responses to the IRFA. The Commission's Office of Public Affairs, Reference Operations Division, will send a copy of this Notice of Proposed Rulemaking, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the RFA. <sup>64</sup> In addition, this Notice of Proposed Rulemaking, including the IRFA (or summaries thereof), will be published in the Federal Register. <sup>65</sup>

#### B. Ex Parte Rules

34. This Notice of Proposed Rulemaking initiates and constitutes a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules. <sup>66</sup> Persons making oral *ex parte* presentations relating to the Notice of Proposed Rulemaking are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required. <sup>67</sup> Other rules pertaining to oral and written presentations are set forth in Section 1.1206(b) as well. Interested parties are to file with the Secretary, FCC, and serve International Transcription Services (ITS) with copies of any written *ex parte* presentations or summaries of oral *ex parte* presentations in these proceedings in the manner specified below for filing comments.

#### C. Filing Procedures

- 35. Pursuant to Sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415 and 1.419, interested parties may file comments on or before January 5, 2001, and reply comments on or before February 5, 2001. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24,121 (1998).
- 36. Comments filed through the ECFS can be sent as an electronic file via the Internet to <a href="http://www.fcc.gov/e-file/ecfs.html">http://www.fcc.gov/e-file/ecfs.html</a>. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply.
- 37. Parties who choose to file by paper must file an original and four copies of each filing. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 Twelfth Street, S.W.; TW-A325; Washington, D.C. 20554.
  - 38. Regardless of whether parties choose to file electronically or by paper, parties should also file

<sup>&</sup>lt;sup>64</sup> See 5 U.S.C. § 603(a).

<sup>65</sup> See id.

<sup>&</sup>lt;sup>66</sup> See Amendment of 47 C.F.R. § 1.1200 et seq. Concerning Ex Parte Presentations in Commission Proceedings, GC Docket No. 95-21, Report and Order, 12 FCC Red 7348, 7356-57 (¶ 27) (1997).

<sup>&</sup>lt;sup>67</sup> See 47 C.F.R. § 1.1206(b)(2), as revised.

one copy of any documents filed in this docket with the Commission's copy contractor, International Transcription Services, Inc., 445 Twelfth Street, S.W., Room CY-B402, Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center, 445 12th Street, S.W., Washington, D.C. 20554.

39. Comments and reply comments must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with section 1.49, 47 C.F.R. § 1.49, and all other applicable sections of the Commission's rules. We also direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments. All parties are encouraged to utilize a table of contents, regardless of the length of their submission.

#### D. Further Information

40. For further information on this notice of proposed rulemaking, contact Paul Murray, Wireless Telecommunications Bureau, Commercial Wireless Division, at (202) 418-7240, pmurray@fcc.gov.

#### V. ORDERING CLAUSES

- 41. Accordingly, IT IS ORDERED, pursuant to sections 1, 2(a), 4(i), 4(j), 201(b), 251(a), 253, 303(r), and 332(c)(1)(B) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152(a), 154(i), 154(j), 201(b), 251(a), 253, 303(r), and 332(c)(1)(B), and sections 1.411 and 1.412 of the Commission's rules, 47 C.F.R. §§ 1.411 and 1.412, this Notice of Proposed Rulemaking is ADOPTED.
- 42. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas Secretary

#### **Appendix**

#### INITIAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act (RFA), the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in this Notice of Proposed Rulemaking (NPRM). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on this NPRM provided above in Section IV(C), and they must have a separate and distinct heading designating them as responses to the IRFA. The Commission will send a copy of the NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the RFA. In addition, the NPRM and IRFA (or summaries thereof) will be published in the Federal Register.

# A. Need for and Objectives of the Proposed Rules

This NPRM requests comment on two issues that pertain to the regulation or possible regulation of certain commercial mobile radio service (CMRS) providers' obligations.

First, the NPRM requests comment on whether the Commission should, either now or in the future, sunset the existing "manual" roaming requirement. The existing manual roaming rule requires that covered cellular, broadband Personal Communications Services (PCS) and Specialized Mobile Radio (SMR) carriers make service available to individual users upon request, so long as the roamer's handset is technically capable of accessing their services. "Manual" roaming is the most rudimentary form of roaming; it is the only form of roaming available when there is no pre-existing contractual relationship between a subscriber, or the subscriber's home system, and the system on which the subscriber wants to roam. In order to make or receive a call, the subscriber must establish such a relationship. Typically, the "manual" roamer accomplishes this by attempting to originate a call by giving a valid credit card number to the carrier providing roaming service. Specifically, the NPRM requests comment on whether the "manual" roaming rule should sunset on five years after the last group of initial licenses are issued for broadband spectrum, that is, November 24, 2002.

Second, the NPRM requests comment on whether the Commission should adopt an "automatic" roaming requirement that would apply to CMRS providers, and if so, how it should be designed and implemented and for what period of time. "Automatic" roaming permits a subscriber to make and receive calls simply by turning on his or her phone, and it requires an agreement between the home and roamed-on systems. Specifically, the NPRM seeks comment, including comment specifically concerning small entities, on whether the Commission should adopt a rule requiring carriers that enter "automatic" roaming agreements with any other carrier to make like agreements available to "similarly situated" providers under non-discriminatory rates, terms, and conditions. The Commission also seeks comment on the potential costs of an "automatic" roaming rule, including whether it would impede

<sup>&</sup>lt;sup>1</sup> See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 et seq., has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 1045-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

<sup>&</sup>lt;sup>2</sup> See 5 U.S.C. § 603(a).

 $<sup>^{3}</sup>$  Id.

technological progress, whether it would interfere with free and open competition, and whether it would expose providers to the risk of losses due to fraud. The Commission requests comment on what administrative costs would be involved, and how any rule should be drafted so as to minimize such costs.

#### B. Legal Basis

The potential actions on which comment is sought in this NPRM would be authorized under sections 1, 2(a), 4(i), 4(j), 201(b), 251(a), 253, 303(r), and 332(c)(1)(B) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152(a), 154(i), 154(j), 201(b), 251(a), 253, 303(r), and 332(c)(1)(B).

## C. Description and Estimate of the Small Entities Subject to the Rules

The RFA requires that an initial regulatory flexibility analysis be prepared for notice-and-comment rulemaking proceedings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities." The RFA generally defines "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).

To assist the Commission in its analysis, commenters are requested to provide information regarding which CMRS entities would be affected by the regulations on which the Commission seeks comment in this NPRM. In particular, we seek estimates of how many small entities that might be affected.

The possible sunset of the existing "manual" roaming rule, if adopted, would eliminate the requirement that covered cellular, broadband PCS and SMR carriers make service available to individual users upon request, so long as the roamer's handset is technically capable of accessing their services. Sunsetting of this rule would be expected to reduce the existing regulatory burden, if any, on small businesses that must comply with the requirements of the "manual" roaming rule.

The "automatic" roaming regulations on which the Commission seeks comment, if adopted, would apply to providers of cellular, broadband PCS, and SMR providers that offer real-time, two-way switched voice or data service that is interconnected with the public switched network and utilizes an in-

<sup>&</sup>lt;sup>4</sup> 5 U.S.C. § 605(b).

<sup>&</sup>lt;sup>5</sup> 5 U.S.C. § 601(6).

<sup>&</sup>lt;sup>6</sup> 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

<sup>&</sup>lt;sup>7</sup> Small Business Act, 15 U.S.C. § 632.

network switching facility that enables the provider to reuse frequencies and accomplish seamless handoffs of subscriber calls.

#### Estimates for Cellular Licensees

Neither the Commission nor the SBA has developed a definition of small entities applicable to cellular licensees. Therefore, the applicable definition of a small entity is the definition under the SBA rules applicable to radiotelephone (wireless) companies. This provides that a small entity is a radiotelephone company employing no more than 1,500 persons. According to the Bureau of the Census, only twelve radiotelephone firms from a total of 1,178 such firms which operated during 1992 had 1,000 or more employees. Therefore, even if all twelve of these firms were cellular telephone companies, nearly all cellular carriers were small businesses under the SBA's definition. In addition, we note that there are 1.758 cellular licenses; however, a cellular licensee may own several licenses. In addition, according to the most recent Trends in Telephone Service data, 808 carriers reported that they were engaged in the provision of either cellular service, Personal Communications Service (PCS), or Specialized Mobile Radio Telephone (SMR) service, which are placed together in the data. 10 We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of cellular service carriers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are 808 or fewer small cellular service carriers that may be affected by any regulations adopted pursuant to this proceeding.

Additionally, any rules adopted pursuant to this rulemaking will apply to cellular licensees only if they offer real-time, two-way switched voice or data service that is interconnected with the public switched network and that utilizes an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls. Although the Commission does not have definitive information, we estimate that most or all small business cellular licensees offer services meeting this description.

## Estimates for Broadband PCS Licensees

The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined "small entity" for Blocks C and F as an entity that has average gross revenues of \$40 million or less in the three previous calendar years. <sup>11</sup> For Block F, an additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding

<sup>&</sup>lt;sup>8</sup> 13 C.F.R. §121.201, SIC code 4812.

<sup>&</sup>lt;sup>9</sup> 1992 Census, Series UC92-S-1, at Table 5, SIC code 4812.

<sup>&</sup>lt;sup>10</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).

See Amendment of Parts 20 and 24 of the Commission's Rules - Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, WT Docket No. 96-59; Amendment of the Commission's Cellular/PCS Cross-Ownership Rule, GN Docket 90-314, Report and Order, 11 FCC Rcd 7824, 7850-52 (¶¶ 57-60) (1996) (Cross Ownership Report & Order); see also Section 24.720(b) of the Commission's Rules, 47 C.F.R. §24.720(b).

three calendar years. <sup>12</sup> These regulations defining "small entity" in the context of broadband PCS auctions have been approved by the SBA. <sup>13</sup> No small businesses within the SBA-approved definition bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F. <sup>14</sup> Based on this information, we conclude that the number of small broadband PCS licensees will include the 90 winning C Block bidders and the 93 qualifying bidders in the D, E, and F blocks, for a total of 183 small entity PCS providers as defined by the SBA and the Commission's auction rules.

Any rule modifications that will be made pursuant to this proceeding will apply to broadband PCS licensees only if they offer real-time, two-way switched voice or data service that is interconnected with the public switched network and that utilizes an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls. Although the Commission does not have definitive information, we estimate that most or all small business broadband PCS licensees offer services meeting this description.

#### Estimates for SMR Licensees

Pursuant to 47 C.F.R. 90.814(b)(1), the Commission has defined "small business" for purposes of auctioning 900 MHz SMR licenses, <sup>15</sup> 800 MHz SMR licenses for the upper 200 channels, <sup>16</sup> and 800 MHz SMR licenses for the lower 230 channels <sup>17</sup> as a firm that has had average annual gross revenues of \$15 million or less in the three preceding calendar years. This small business size standard for the 800 MHz and 900 MHz auctions has been approved by the SBA. Any rules adopted pursuant to this NPRM will apply to SMR licensees only if they offer real-time, two-way switched voice or data service that is interconnected with the public switched network and that utilizes an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls. Although the Commission does not have definitive information, we estimate that very few small business, incumbent site-by-site SMR licensees offer services meeting this description. Geographic licensees are considered more likely to offer such services. In all cases, we provide estimates below that are conservative so as to not underestimate the impact on small entities.

<sup>&</sup>lt;sup>12</sup> Cross Ownership Report & Order, 11 FCC Rcd at 7852 (¶ 60).

<sup>&</sup>lt;sup>13</sup> See, e.g., Implementation of Section 309(j) of the Communications Act – Competitive Bidding, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5532, 5581-84 (¶ 114-20) (1994).

FCC News, Broadband PCS, D. E and F Block Auction Closes, No. 71744 (released Jan. 14, 1997).

<sup>&</sup>lt;sup>15</sup> See Amendment of Parts 2 and 90 of the Commission's Rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and the 935-940 MHz Bands Allotted to the Specialized Mobile Radio Pool, PR Docket No. 89-583, Second Order on Reconsideration and Seventh Report and Order, 11 FCC Red 2639 (1995).

<sup>&</sup>lt;sup>16</sup> See Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz frequency Band, PR Docket No. 93-144, First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rulemaking, 11 FCC Rcd 1463 (1995).

<sup>&</sup>lt;sup>17</sup> See Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz frequency Band, PR Docket No. 93-144, Second Report and Order, 12 FCC Red 19079 (1997).

Sixty winning bidders for geographic area licenses in the 900 MHz SMR band qualified as small businesses under the \$15 million size standard. We do not know which of these licensees will offer real-time, two-way switched voice or data service that is interconnected with the public switched network and that utilizes an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls. We estimate that the number of small business 900 MHz SMR geographic area licensees that could be affected by rule modifications is 60 or fewer.

The auction of the 525 800 MHz SMR geographic area licenses for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten (10) winning bidders for geographic area licenses for the upper 200 channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard. We do not know which of these licensees will offer real-time, two-way switched voice or data service that is interconnected with the public switched network and that utilizes an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls. Therefore, we estimate that the number of small business 800 MHz SMR geographic area licensees for the upper 200 channels that could be affected by rule modifications is ten or fewer.

The Commission anticipates that a total of 3,853 EA licenses will be auctioned in the lower 230 channels of the 800 MHz SMR service. This figured is derived by multiplying the total number of Economic Areas (EAs) (175)<sup>18</sup> by the number of channel blocks (22) in the lower 230 channels.<sup>19</sup> Three additional upper band channels will be licensed as well.<sup>20</sup> No party submitting or commenting on the petitions for reconsideration giving rise to our *Reconsideration* of October 8, 1999,<sup>21</sup> commented on the potential number of small entities that might participate in the auction of the lower 230 channels and no

The Department of Commerce Bureau of Economic Analysis has established 172 EAs which cover the continental United States. *See* "Final Redefinition of the BEA Economic Areas," 60 Fed. Reg. 31,114 (March 10, 1995). The Commission has established three additional EA licensing regions for the five U.S. possessions.

The lower 80 channels were divided into 16 blocks of 5 channels each and the General Category channels were divided into 6 blocks of 25 channels each. This results in 22 channel blocks available for auction in each of the 175 EAs for a total of 3,850 licenses. *See also Public Notice*, Auction of Licenses for 800 MHz Specialized Mobile Radio (SMR) Service General Category Frequencies in the 851-854 MHz Band Scheduled for August 23, 2000," DA 00-667 (rel. March 23, 2000); *Public Notice*, Auction of Licenses for 800 MHz Specialized Mobile Radio (SMR) Frequencies in the Lower 80 Channels Scheduled for September 13, 2000, DA 00-668 (rel. March 23, 2000); *Public Notice*, Auction of Licenses for 800 MHz Specialized Mobile Radio (SMR) Frequencies in the Lower 80 Channels Scheduled for September 13, 2000, DA 00-668 (rel. March 23, 2000), 65 Fed Reg. 17272 (March 31, 2000) (2,800 licenses to be auctioned); *Public Notice*, Auction of Licensees For 800 MHz Specialized Mobile Radio (SMR) Service in the General Category Band (851-854 MHz) and Upper Band (861-865 MHz), DA 00-1100 (rel. May 18, 2000) (rescheduling auction from August 23<sup>rd</sup> to August 16, 2000, and announcing procedures and minimum opening bids for 1,053 licenses).

<sup>&</sup>lt;sup>20</sup> *Public Notice*, Auction of Additional Licenses for 800 MHz Specialized Mobile Radio (SMR) Service to Be Included in Auction No. 34 Scheduled for August 23, 2000: Comment Sought on Reserve Prices or Minimum Opening Bids and Other Auction Procedural Issues, DA 00-877 (rel. April 18, 2000) (three additional licenses).

Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, *Memorandum Opinion and Order on Reconsideration*, 14 FCC Rcd. 17556 (1999), 64 Fed Reg. 71042 (Dec. 20, 1999).

reasonable estimate can be made. Therefore, we conclude that the number of 800 MHz SMR geographic area licensees for the lower 230 channels that may ultimately be affected by this rule modification could be as many as 3,853.

With respect to licensees operating under extended implementation authorizations, by November 1997 thirty-three licensees with extended implementation authority in the 800 MHz SMR Service were granted two years two complete the buildout of their systems. At this time, our records indicate that twenty-seven licensees with extended implementation authority still exist, but there may be as few as twenty-two remaining as independent entities. The Commission will soon receive filings that will clarify the situation. Until then, we will assume that there are twenty-seven remaining licensees in this category and that they all qualify as small businesses utilizing the SBA's wireless size standard of \$15 million or less. However, we do not know how many of these licensees offer real-time, two-way switched voice or data service that is interconnected with the public switched network and that utilizes an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls. Therefore, estimating conservatively, we conclude that the number of small business SMR licensees operating in the 800 MHz and 900 MHz bands under extended implementation authorizations that could be affected by a rule modification is up to 27 entities.

The Commission does not have an accurate estimate of the number of incumbent site-by-site SMR licensees, and a reliable figure will not be available until the SMR site-by-site licensees migrate to the Universal Licensing System. Making this estimate is complicated by the number of recent transactions that have occurred in the 800 MHz SMR service. However, our task is also greatly simplified for purposes of this regulatory flexibility analysis because we are looking for a very specific type of SMR licensee. That is, the licensee must: first, qualify as a small business (*i.e.*, average annual gross revenues of \$15 million or less in the three preceding calendar years); second, offer real-time, two-way switched voice or data service that is interconnected with the public switched network; and third, use an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls. These criteria greatly restrict the number of SMR providers who could be affected by this new rule. Although there may be SMR carriers who provide such services it is high unlikely that they will be small entities or small businesses given the nature of the SMR providers and the development of that industry. Consequently, even though there may be no licensees that satisfy these criteria, we will err on the sake of caution and conclude that 25 small entities may fall into this category.

## D. Reporting, Recordkeeping, and Other Compliance Requirements

We anticipate that any rules that may be adopted pursuant to this NPRM will impose no reporting or recordkeeping requirements. The only compliance costs likely to be incurred, as a result, are administrative costs to ensure that an entity's practices are in compliance with the rule. The only compliance requirement of the new rules is that licensees subject to any automatic roaming requirement (*i.e.*, cellular licensees, broadband PCS licensees, and geographic area 800 MHz and 900 MHz SMR licensees that offer real-time, two-way, interconnected switched voice and data service) would have to provide non-discriminatory access to their wireless systems via automatic roaming once they had reached an agreement with any carrier to permit automatic roaming. As noted above in this Initial Regulatory Flexibility Analysis, and in the text of

Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, *Order*, 13 FCC Rcd. 1533 (1997); Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, *Memorandum Opinion and Order*, 12 FCC Rcd. 18,349 (1997).

the NPRM, we seek comment on the potential costs of implementing an automatic roaming requirement in this context, including such potential costs on small business.

# E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.<sup>23</sup>

As noted, the possible sunset of the manual roaming rule, if adopted, would be expected to reduce any existing economic impact on small business. Therefore, the only possible negative economic impacts that might arise from this NPRM are those what would be associated with an "automatic" roaming rule.

As indicated in the NPRM, were the Commission to propose an "automatic" roaming rule, the subscribers of any carrier requesting that another carrier enter a nondiscriminatory automatic roaming arrangement would have the burden of ensuring that its subscribers were using equipment that is technically capable of accessing the roamed-on carrier's network. Thus, to the extent the roamed-on carrier's network were that of a smaller carrier, the economic burden of having equipment technically capable of accessing the network would not fall on the smaller carrier. Also, we note that an automatic roaming rule, if adopted, would not require a small business to modify its network to accommodate automatic roaming.

In this NPRM, the Commission also specifically has requested comments from small businesses that would provide information on the extent to which such a rule would impose costs and administrative burdens on them. For instance, we inquire whether the costs of such a rule would impact smaller carriers disproportionately, such that we should fashion the rule to reach only the larger providers. The Commission will draw on this information when considering whether a rule should be promulgated, and if so, how it can best be drafted to minimize any costs placed on small businesses. Furthermore, we inquire whether adoption of an "automatic roaming" rule would in fact be in the best interests of small businesses. Specifically, in considering whether or not to adopt an "automatic roaming" rule, we inquire of smaller carriers whether such a rule would be most beneficial to such carriers to the extent they may have difficulty obtaining agreements from larger carriers absent such a rule.

F.	Federal Rules	that May	Duplicate.	Overlap, or	Conflict	With the	Proposed	Rul	les
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None.

<sup>&</sup>lt;sup>23</sup> 5 U.S.C. § 603(c).